



CITY OF ASHEVILLE

STORMWATER SERVICES



we all live
downstream.

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Finance Committee

3/24/15

McCray Coates

Stormwater Services Manager



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Purpose

To request an additional ditch/maintenance crew for the Stormwater Services Division of the Public Works Department to increase the level of service provided to our citizens.



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Background

Stormwater is the #1 source of water pollution in North Carolina and the United States. Storm drains carry untreated water directly to our rivers and streams. In an effort to restore and preserve the integrity of our nation's waters, the federal government requires the City of Asheville and all similarly-sized U.S. cities that own and maintain storm drain systems to establish and implement stormwater programs that reduce water pollution.



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Stormwater Program

Five Sections

- Capital Improvement Projects
- Professional Services
- In-house Construction & Maintenance
- Internal Operations
- Flood Mitigation Projects



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Capital Improvement Projects

The City of Asheville has been actively partnering with groups such as:

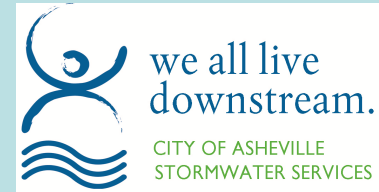
- Clean Water Management Trust Fund
- NC Department of Transportation (NCDOT)
- NC Division of Water Resources (NCDWR)
- GoldenLEAF Foundation
- US Economic Development Administration (EDA)
- US Army Corps of Engineering (USACE)



Lake Craig / Azalea Road



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Craven Street Project

- Roadway improvements
- LID public parking lot
- Public greenway with amenities
- Stream restoration
- Installation of Stormwater BMP's



Project Partners - Economic Development Administration, Golden Leaf Foundation, Clean Water Management Trust Fund



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Professional Services

City Wide Drainage Assessment

Assessment of the public drainage structures within the city limits to include an evaluation of the hydraulic capacity of the systems, upgrades to systems, priority list of capital improvement projects, watershed assessment priorities, and GIS information where needed

On-Call Services

Professional civil engineering services on an "on-call" basis for projects such as Westwood Road, Dingle Creek Wetland, Westover Road, and Morris Street / W. Asheville Park



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In-house Construction & Maintenance



Ditching operations

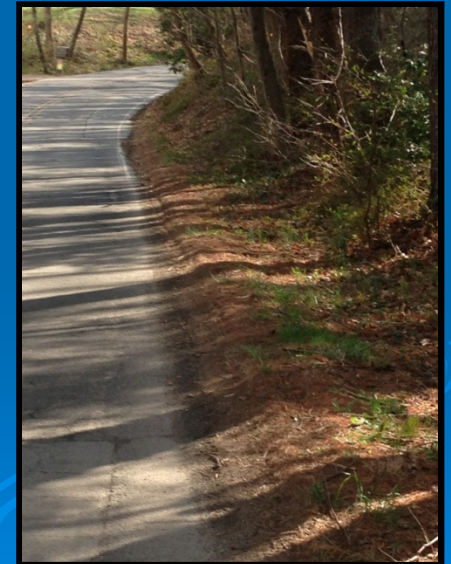
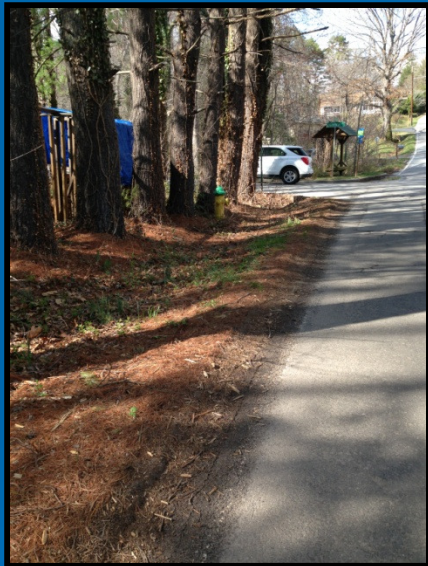




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In-house Construction & Maintenance



Areas in need of maintenance



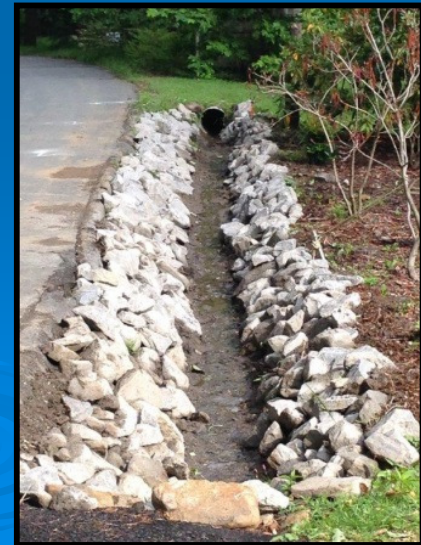
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In-house Construction & Maintenance



Spooks Branch Road





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In-house Construction & Maintenance



Luther Road



East Oakview Road





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In-house Construction & Maintenance



Curve Street





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In-house Construction & Maintenance



Caribou Road



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In-house Construction & Maintenance



Upland Road



New pipe goes in
and life goes on...



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Storm System Cleaning



✓4,983 Drains Cleaned / Inspected



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Street Sweeping & Cleaning

✓1,739 Miles Swept

✓548 Tons Removed





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Internal Operations

Stormwater Utility Locator – Effective October 1, 2014
all new stormwater infrastructure to be mapped

New equipment purchases – New street sweeper and
two new trailers to replace aging equipment

Governance – Utility Cut Program, reimbursements for
internal department support (HR, IT, Legal, etc)



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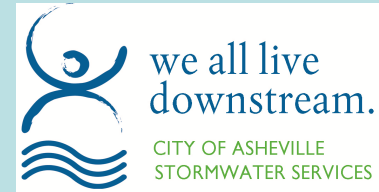


Flood Mitigation Projects

- **Swannanoa River Watershed**
- **Biltmore Avenue Bridge**
- **Lake Craig / Azalea Road**



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Lake Craig / Azalea Road Project

- Converted to one-way loop traffic pattern to improve traffic circulation
- New bridge crossing
- Provided bike lanes and pedestrian walkways
- Incorporated appropriate stormwater BMPs
- Repaved Azalea Road
- Traffic signal at Swannanoa River Road
- New water line to soccer complex





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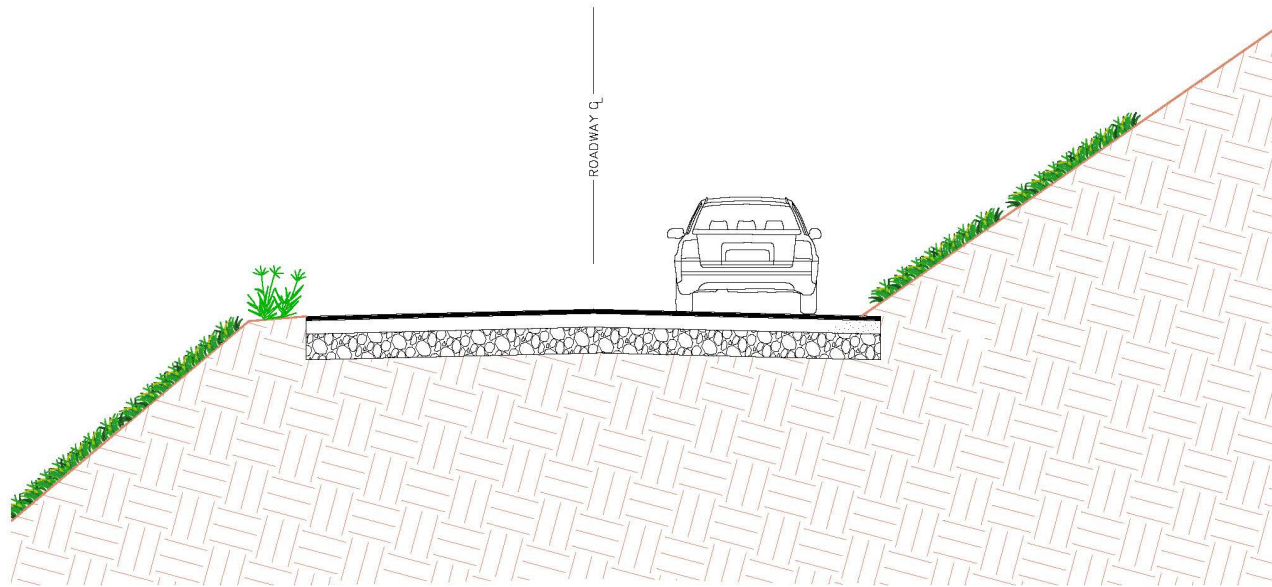
Ditching operations

- Road side lane miles with curb and gutter, no ditching required 407
- Road side lane miles eligible for ditching: 413
- Ditching is essential in maintaining a roadway system with our topography



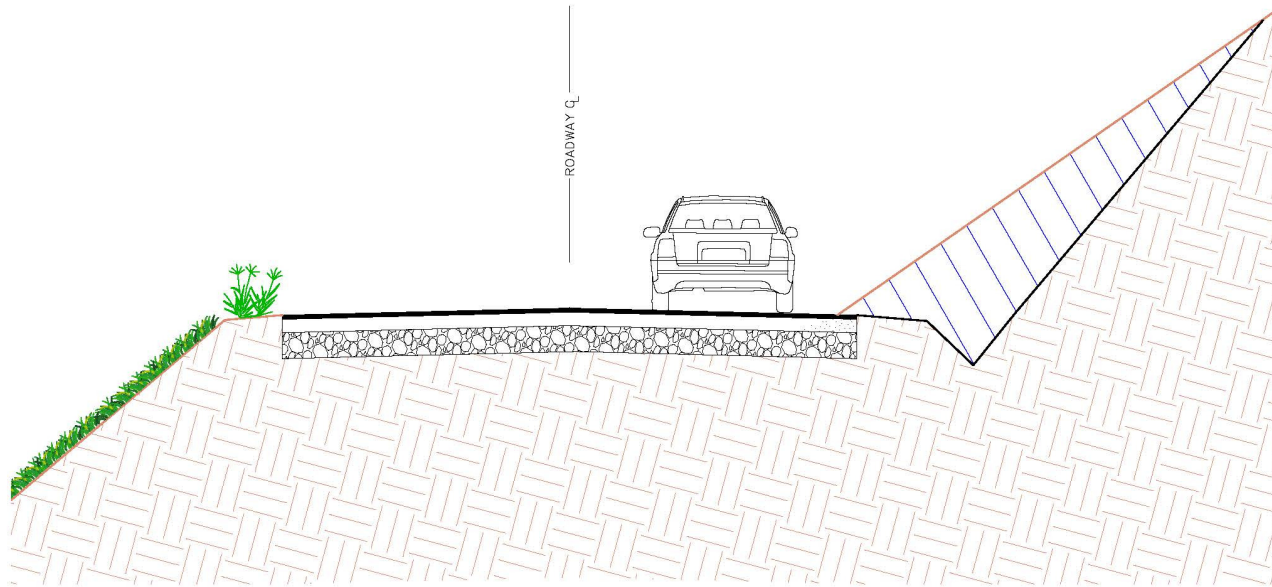


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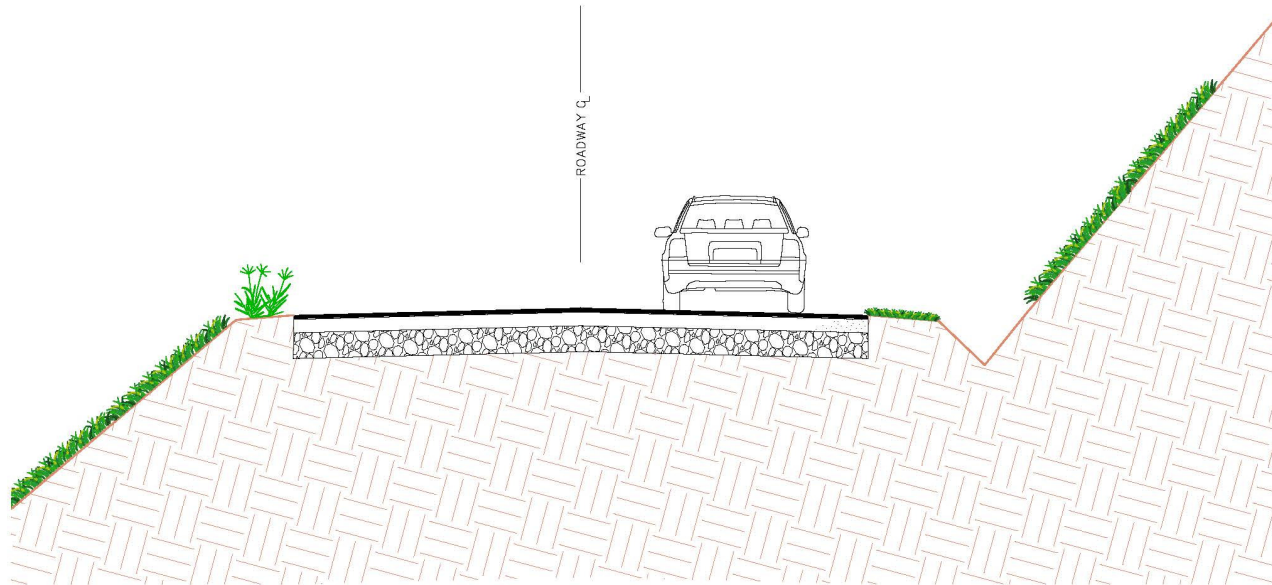


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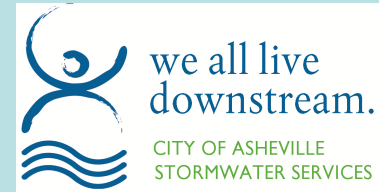


- Initial start-up cost associated with the purchase of the new equipment needed is approximately \$650,000.
- Estimated annual cost of this additional crew is \$362,000.
- Ditching is paramount to maintaining a roadway system





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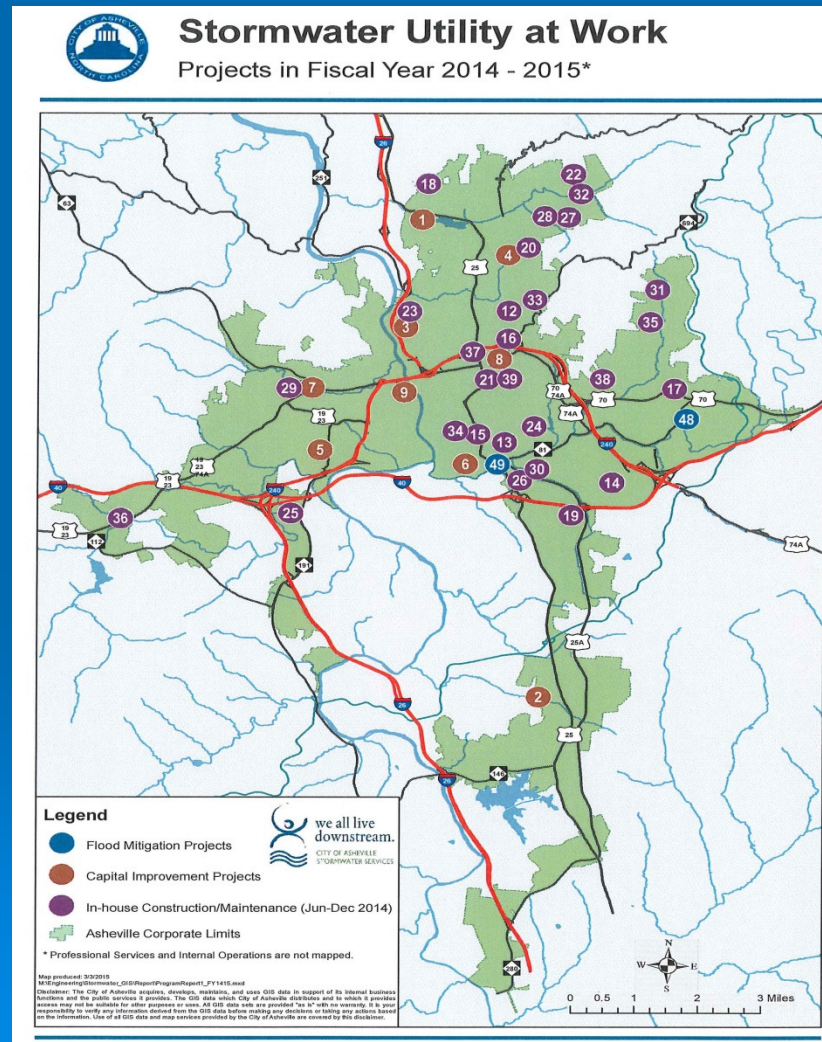
Highlights

During July 1, 2014 - December 31, 2014
Stormwater Services completed:

- ↗ 1,105 linear feet of new or replaced storm drainage structures
 - ↗ 1,739 miles of city streets swept
- ↗ 548 tons of solids removed from city streets and drainage structures
 - ↗ 4,983 catch basins & storm drains cleaned / inspected
- ↗ 15,132 linear feet of ditch maintenance/ shoulders repaired
 - ↗ 200 storm drains stenciled by 13 volunteers
 - ↗ 27,500 informational letters mailed to residence
 - ↗ Stopped illicit discharge from leaving 10 sites



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Questions?

